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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|----------------------------|----------------------|-------------------------------|------------------|
| 10/725,053 | 12/02/2003 | Tadahiro Kegasawa | Q78706 | 2949 |
| 23373 SUGHRUE MI | 7590 07/09/200 ON, PLLC | EXAMINER | | |
| 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037 | | | WOLLSCHLAGER, JEFFREY MICHAEL | |
| | | | ART UNIT | PAPER NUMBER |
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| | | | | |
| | | | MAIL DATE | DELIVERY MODE |
| | | | 07/09/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | | | | | |
|--|---|-----------------|--|--|--|--|--|--|
| | 10/725,053 | KEGASAWA ET AL. | | | | | | |
| Office Action Summary | Examiner | Art Unit | | | | | | |
| · | Jeff Wollschlager | 1732 . | | | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | | | |
| Status | | | | | | | | |
| 1) Responsive to communication(s) filed on 20 Ag | oril 2007. | | | | | | | |
| · · · — | action is non-final. | | | | | | | |
| 3) Since this application is in condition for allowar | pplication is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | | |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | | | |
| Disposition of Claims | | | | | | | | |
| 4)⊠ Claim(s) <u>1-5 and 10-17</u> is/are pending in the application. | | | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | | | |
| 6) Claim(s) <u>1-5 and 10-17</u> is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | | | |
| | | | | | | Application Papers | | |
| | | | | | | 9) The specification is objected to by the Examiner. | | |
| 10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner. | | | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | | |
| Priority under 35 U.S.C. § 119 | , | | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: | | | | | | | | |
| 1. ☐ Certified copies of the priority documents have been received. | | | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | | |
| | | | | | | | | |
| Attachment(s) | | | | | | | | |
| 1) Notice of References Cited (PTO-892) | 4) Interview Summary (PTO-413) | | | | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail D 5) Notice of Informal F | | | | | | | |
| 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date | 6) Other: | ** | | | | | | |

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DETAILED ACTION

It is noted for the record that Examiner Wollschlager has assumed responsibility for this application from Examiner Eashoo.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 20, 2007 has been entered.

Response to Amendment

Applicant's amendment to the claims filed April 20, 2007 has been entered. Claim 1 is currently amended. Claims 6-9 were previously canceled. Claims 1-5 and 10-17 are pending and under examination.

Claim Objections

Claims 2, 10 and 11 objected to because of the following informalities: The recitation "MFR" should be rendered "melt flow rate". Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 10-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards

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as the invention. The terms "high", "large", "low" and "small" found in claims 10-17 are relative terms that render the claims indefinite. The terms are not defined by the claims, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 and 10-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Blemberg et al. (US 5,705,111).

Regarding claim 1, Blemberg et al. teach a method for making a multi-layered film comprising: joining a first/core resin (12) with a second resin (16) that encapsulates/encloses the edges of the first/core resin layer (Figures 8-10). The first/core resin has a convex shape and the second resin has a concave shape (Figures 8-10). The joined resins are extruded through an extruding die (Figure 1) and then further joined with additional layers of material to form the multi-layered film (Abstract; col. 2, lines 6-40; col. 5, lines 3-18; col. 6, lines 3-59; col. 10, lines 5-24).

The examiner notes that Blemberg et al. do perform steps to reduce/control the degree of the convex shape of the core layer, but that the convex shape, as shown in Figures 8-10, is still present in the produced film (col. 7, lines 24-58; col. 9, lines 28-57).

As to claims 2, 10, and 11, Blemberg et al. teach the degree of encapsulation/enclosing is controlled/impacted/adjusted according to the melt flow rate of the resins (col. 6, lines 22-50).

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It is noted that the relative terms of claims 10 and 11 are intrinsically met by the differences in material parameters taught by Blemberg et al.

As to claims 3, 12, and 13, Blemberg et al. teach the degree of encapsulation/enclosing is controlled/impacted/adjusted according to the flow rate of resins (col. 10, lines 5-24). It is noted that the relative terms of claims 12 and 13 are intrinsically met by the differences in material parameters taught by Blemberg et al.

As to claims 4, 14 and 15, Blemberg et al. teach the degree of encapsulation/enclosing is controlled/impacted/adjusted according to the thermal history/temperatures of the resins (col. 6, lines 22-50). It is noted that the relative terms of claims 14 and 15 are intrinsically met by the differences in material parameters taught by Blemberg et al.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2-5 and 10-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blemberg et al. (US 5,705,111), as applied to claims 1-4 and 10-15 above, in view of Kegasawa et al. (US 6,203,742).

As to claims 2-5 and 10-17, Blemberg et al. teach the method of claims 1-4 and 10-15 as set forth above. Alternatively regarding claims 2-4 and 10-15, and as to claims 5, 16 and 17, Kegasawa et al. suggest that it is critical/necessary to know the relationship between rheological characteristics (i.e. viscosity, MFR, etc.), temperature, and flow rate in order to balance the extrusion pressure along the width of the film/die, including the pressure difference at the ends

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of the die/film (4:20-5:22). It is noted that MFR is directly related to viscosity and a person of ordinary skill in the art would readily be able to make the association between the two terms. Furthermore, since Kegasawa et al. refers to adjusting the pressure across the die width by varying the other aforementioned parameters, "adjustment of the width" is readable or intrinsic upon adjustment of the other parameters.

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have adjusted either the viscosity/MFR, temperature, or flow rate, as taught by Kegasawa et al., in the process of Blemberg et al., in order to adjust the size and degree of enclosing/encapsulating of the different resins. Lastly, with respect to claims 10-17, the limitations "is large", "is small", "is high", and "is low" are relative terms of degree and therefore are met by the differences in material parameters as taught by each of the applied references.

Response to Arguments

Applicant's arguments filed April 20, 2007 have been considered, but are moot in view of the new grounds of rejection necessitated by the amendment.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Wollschlager whose telephone number is 571-272-8937. The examiner can normally be reached on Monday - Thursday 7:00 - 4:45, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you

would like assistance from a USPTO Customer Service Representative or access to the

automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JW

Jeff Wollschlager Examiner Art Unit 1732

June 29, 2007

CHRISTINA JOHNSON
SUPERVISORY PATENT EXAMINER